



# BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

Department of Environmental Health & Safety

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REVISED JUNE 2009

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## **I. Introduction**

The purpose of the TU Exposure Control Plan is to reduce the possibility of occupational exposure to pathogenic microorganisms that are found in human blood and can cause disease in humans. Occupational exposure, as defined by the Maryland Occupational Safety and Health Administration (MOSH), is the "reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious material that may result from the performance of an employee's duties". Examples of common pathogens encountered are Hepatitis B Virus (HBV), Hepatitis C Virus, and Human Immunodeficiency Virus (HIV). Minimization or elimination of exposure to potentially infectious material will be accomplished through the use of appropriate engineering controls, safe work practices, personal protective clothing and equipment, good housekeeping practices, workplace monitoring, post-exposure monitoring, and employee training and information. A schedule for initial implementation of the requirements of the standard can be found in Appendix A.

Towson University will be evaluated initially and annually thereafter to determine the effectiveness of this Exposure Control Plan. This will include implementing more effective procedures and equipment to ensure compliance with all applicable regulations. This plan will be made available to all employees, employee representatives, and regulatory agencies on request.

Areas on campus will be evaluated to determine where campus employees can possibly come in contact with bloodborne pathogens. From this, positions that require occupational exposure to potentially infectious material will be identified and a list of job classifications comprised. At the time of employment, individuals who will be performing duties with the potential for contact with bloodborne pathogens will be provided training. Through the use of the **Towson University Employee Safety Programs** manual, initial information pertaining to the program will be provided to employees. A copy of the pertinent sections of this manual can be found in Appendix B.

## **II. Occupational Exposure Determination**

TU faculty and staff positions, classified and unclassified, will be evaluated to determine job specifications which include tasks and procedures with a possibility of an occupational exposure.

Personnel who perform tasks with the potential for exposure will be enrolled in the program. In general, these tasks will include health care, emergency response and special medical waste disposal. The tasks performed by Health Care employees will be outlined in their specific departmental procedures. This will include general patient care and sample analysis. Emergency response responsibilities will include providing first aid and cardiopulmonary resuscitation for injured personnel. Incinerator operators will be responsible for disposal of special medical waste that is generated on campus. This exposure determination will be made without regard to the use of personal protective equipment.

For an initial determination, all locations with personnel who routinely have the possibility for direct contact with blood or other potentially infectious material will be identified. This will include all areas that provide health care. These locations and responsibilities include the TU Health Center (Dowell Hall), the TU Athletic Training Room (Towson Center and TU athletic fields), the Burdick Hall Training Staff (Burdick Hall and TU athletic fields), and the Speech and Hearing Clinic (Van Bokkelen Hall). The Nursing Department and the Occupational Therapy Department faculty who perform or assist with clinical work outside of TU will also be included in the program because they are considered TU employees by these outside establishments.

In addition to these areas that provide health care, emergency response personnel will be included in the program. These positions include the TU Police Department, the Department of Environmental Health and Safety (EHS), certain Facilities Management positions, Project MARJ, and the Child Care Facility. Under emergency situations, these departments are required for assistance and have the possibility of coming in contact with potentially infectious material in any location on campus.

A listing of the job classifications and present personnel working at TU can be found in Appendix C and Appendix D, respectively.

### **III. General Requirements for Exposure Control**

All locations on campus will be evaluated to determine the extent to which engineering controls can be implemented to reduce the likelihood of exposure. Engineering controls will include devices such as all classes of biological safety hoods, enclosed centrifuges and disposable puncture-proof containers. To further reduce the possibility of exposure, safe work practices will be implemented. These practices will include the CDC Universal Precautions for procedures that occur on campus, special medical waste disposal procedures, disinfection procedures, housekeeping responsibilities, use of personal protective equipment, and spill response procedures. All campus health-care workers, emergency response personnel and incinerator operators will adhere to these procedures.

### **IV. Work Place Monitoring**

Periodic workplace monitoring will be the responsibility of the supervisor of each involved department. These surveys will ensure that all engineering controls are present and operational, that all appropriate work practices previously established are being followed, and that personal protective equipment is being used. When an exposure incident occurs, information from the investigation of the incident will be provided to the TU Medical Officer for review. The Medical Officer will be responsible for establishing additional work practices/engineering controls to prevent the recurrence of the exposure. Environmental Health and Safety will be involved with exposure incident investigations.

## **V. Hepatitis B Vaccination**

All employees in the program will be offered a Hepatitis B vaccine at no cost. Initially, EHS will assume the costs for the vaccination and, if required, a booster. The vaccination series will be administered by the TU Health Center under the supervision of a licensed physician. If an employee chooses to receive the vaccination series outside of the university, all documentation shall be provided to the TU Medical Officer. TU will be responsible for payment equal to the amount paid for the vaccine available through the Health Center. The remainder will be the responsibility of the individual. Employees who choose not to receive the vaccine will be required to sign a declination form. Copies of the form will be kept at the TU Health Center and EHS. If the employee decides to receive the vaccination at a later date and is still enrolled in the program, the series will be offered in the manner described above. Provisions for handling personnel who are not medically qualified to receive the vaccine will be handled on a case-by-case basis. Examples of the procedure for the receipt of the vaccine and of the declination form are located in Appendix F.

## **VI. Post-exposure Monitoring**

When an exposure incident occurs, the employee will notify their immediate supervisor. The incident will be handled as a Workman's Compensation Claim for full-time employees. The employee will be required to submit a First Report of Injury concerning the exposure to the Department of Human Resources. In addition to this, the TU Health Center will be contacted to provide post-exposure medical evaluation and counseling. Flow diagrams for reporting exposure incidents can be found in Appendix G.

Upon receipt of a First Report of Injury and at the request of the exposed employee, post-exposure monitoring will be provided. Examples of the exposure incident reporting forms can be found in Appendix H. This monitoring will be used for a determination of the presence of Hepatitis B Virus, Human Immunodeficiency Virus, Hepatitis C Virus, and other suspected bloodborne pathogens.

If the source patient is still present, they will be informed of the incident and, if written consent is obtained, will be tested for the presence of bloodborne pathogens. The results of the analysis can be used to determine if further evaluation and counseling for the exposed employee is needed. If the source patient is already known to be infected, additional testing for the specific pathogen is not required. All test results will be made available to the exposed employee. If the source patient refuses testing, the exposed employee will be counseled regarding the risk of infection and evaluated for the presence of pathogens. This employee will be required to report all acute illnesses associated with high fever and to seek medical evaluation for each illness for a 12 week period. If the employee tests are negative, additional testing will be performed six weeks after the exposure and on a periodic basis thereafter. During this period of time, the employee will follow all precautions to limit the transmission of disease.

All medical evaluations will be performed by or under the supervision of a licensed physician and will incorporate procedures to protect the identities of involved personnel. The TU Medical Officer will be the initial contact in all situations concerning exposure to bloodborne pathogens. Laboratory tests will be conducted by an accredited laboratory for the type of evaluation desired. A copy of this Exposure Control Program, a description of the exposed employee's duties, and all

exposure form information will be made available to the physician prior to evaluation. The results from each evaluation will be supplied to the employee within 15 working days after the completed evaluation. The evaluation by the physician will be limited to the following:

1. Recommended limitations concerning the employee's ability to receive a Hepatitis B vaccination.
2. Specific diagnoses that determine the employee's ability to receive vaccinations.
3. Indication that the employee has been informed of the results of the medical evaluation and of any medical conditions resulting from the exposure which require further evaluation or treatment.

For every individual that has reported an occupational exposure and has been medically monitored, counseling will be provided at no cost to the employee. The counseling will provide information on the following:

1. Modes of transmission of bloodborne pathogens.
2. Availability of medically established post-exposure treatment.
3. Available resources within the community.
4. Details available about the nature of the occupational exposure.

The Post-Exposure Medical Monitoring procedures can be found in Appendix I.

## **VII. Employee Information, Training, and Education**

At the time of initial employment or within ninety days of the effective date of the MOSH regulation, all personnel in the BBP program will receive the **Towson University Employee Safety Programs** manual. This will provide initial information to the employee concerning the program. Each employee will be required to attend a training session which has been approved by the TU Medical Officer. This training will provide personnel with information to properly use established engineering controls, work practices, and personal protective equipment. An outline of the minimum requirements for training, a Training Verification Form, and Instructor qualifications can be found in Appendix J. In the event that a new employee has received training at a previous place of employment, documentation of the training will be required. In addition, site-specific information will be provided to the employee for work at the university. Retraining will be required on an annual basis and when procedures change that increase the potential for contact.

## **VIII. Special Medical Waste Disposal**

The Department of Environmental Health and Safety will be responsible for coordinating the disposal of Special Medical Waste in accordance with all applicable regulations. All waste will be collected in leaked-proof containers labeled as a Biohazard. Pick up for disposal of this waste will be at the point-of-generation. The SMW will be shipped off-campus for disposal. A bill of lading for transport will be completed at time of pick-up. All manifests will be kept by the Department of Environmental Health and Safety. TU Special Medical Waste Disposal Procedures can be found in Appendix K.

## **IX. Recordkeeping**

This Exposure Control Plan will be present for review through either the Department of Environmental Health and Safety or the TU Health Center. All formal records pertaining to post-exposure medical evaluation and counseling will be kept in accordance to 29 CFR 1910.20. These records and the status of the Hepatitis B vaccine will be available through the TU Health Center. The Department of Environmental Health and Safety will be responsible for records pertaining to employee training, post-exposure investigations, and special medical waste disposal.

## **Appendix A: Schedule for Initial Implementation of Standard**

**Effective Date: 1/1/92**  
**Revision #: 2**  
**Revision Date: 06/04/09**



## Written Exposure Control Program

March 6, 1992

Identification of Job Classifications

March 6, 1992

Identification of Personnel

March 6, 1992

## Methods of Compliance

General (Universal Precautions)

Health Care

April 30, 1992

Police Department

August 5, 1988

Speech and Hearing Clinic

July 31, 1992

Emergency Response

May 30, 1992

Incinerator Operation

February 3, 1994

Engineering Controls

August 30, 1992

Personal Protective Equipment

August 30, 1992

Housekeeping

August 30, 1992

Special Medical Waste Disposal

1988

Hepatitis B Vaccination

Sept 30, 1992

Post-Exposure Monitoring

March 6, 1992

Labels and Signs

August 30, 1992

Employee Training

August 30, 1992

Recordkeeping

August 30, 1992

## **Appendix B: Employee Notification Information**

**Effective Date: 1/1/91**  
**Revision #: 4**  
**Revision Date: 06/04/09**



# Employee Safety Programs

Department of Environmental Health & Safety

Phone: (410) 704-2949  
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Email: [Safety@towson.edu](mailto:Safety@towson.edu)  
Website: [www.towson.edu/ehs/index.html](http://www.towson.edu/ehs/index.html)

REVISED MARCH 2009

## Special Medical Waste (SMW) Disposal

The Department of Environmental Health & Safety (EHS) is responsible for the disposal of SMW in accordance with all applicable Federal and State regulations. SMW is biomedical waste and is defined as all non-radioactive biological, pathological and infectious materials to include:



- Human or animal anatomical materials;
- Blood or blood soiled materials;
- Clinical specimens (sputum, urine, feces, blood, etc.);
- Sharps (syringes, needles, surgical instruments, etc.);
- Unused cultures and stocks of infectious agents;
- Contaminated animal bedding, and;
- Biologically contaminated lab materials

SMW contaminated with radioactive materials are regulated for disposal as radioactive wastes.

Preserved biological specimens must be removed from any preservative solutions and thoroughly drained of all free liquids prior to disposal. Typically, these preservative solutions are regulated as hazardous chemical wastes and cannot be disposed of as SMW. Waste preservative solutions should be presumed to be regulated hazardous chemical wastes and managed in accordance with TU's *Hazardous Waste Management Procedures* pamphlet.



All SMW will be disposed of in leak-proof containers labeled as Biohazard. Needles, syringes, scalpel, etc., must be disposed of in puncture-proof sharps containers. EHS has approved SMW boxes, bags and sharps disposal containers available at no charge. It is the generators responsibility to properly package all SMW in the appropriate containers.



To request SMW disposal materials or to request the disposal of SMW, contact EHS at (410) 704-2949 or at [safety@towson.edu](mailto:safety@towson.edu).

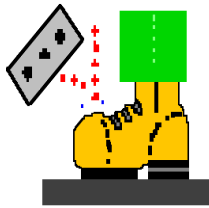
## Personal Protective Equipment



The OSHA Personal Protective Equipment Standard (29 CFR 1910.132 .133, .135, .136 and .138) requires Towson University to furnish and require employees to use suitable personal protective equipment (PPE), such as hard hats, safety glasses, goggles or splash shields, gloves, safety shoes, etc. where there is a “reasonable probability” that injury can be prevented by such equipment. PPE will be provided to all employees who are required to wear it at no cost to the employee. Hearing and respiratory protection are covered under other specific OSHA standards.

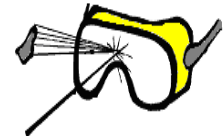


While the use of PPE is important, it is only a supplementary form of protection, necessary where all hazards have not been controlled through other means of engineering or administrative controls. Engineering controls will be implemented before the use of PPE.



Employees shall receive training concerning the hazards of the chemicals, processes, or instruments used in their work and the measures that they can take to protect themselves from these hazards. They will also be trained in how to properly wear and maintain their personal protective equipment. PPE will be worn in accordance with manufacturer’s instructions.

Managers and Supervisors are responsible for knowing the hazards in their areas that require PPE and assuring that safe operations are maintained within their departments to prevent injuries to the eyes, face, head, hands and feet. They must also enforce PPE use in the areas in which it is required and immediately notify the PPE Program Administrator of any new job hazards that require new or different types of PPE.



Material Safety Data Sheets (MSDS) or other references should be consulted for information on the type of protective measures required for the particular work being performed. Eye, face, head, hand and foot hazards have been assessed on campus by EHS based upon a review of employee job descriptions and job audits. The appropriate protection will be provided for all affected employees. Employees are required to use PPE wherever hazards exist.

## **Appendix C: Campus positions with potential for occupational exposure**

**Effective Date: 1/1/91**  
**Revision #: 6**

**Revision Date: 06/04/09**

- 1. TU Health Center**
  - a. Physician
  - b. UMS Licensed Practitioner Nurse III
  - c. Nurse Practitioner
  - d. Nurse
  - e. UMS Campus Health Nurse II
  - f. Physician's Assistant
  
- 2. TU Athletic Department**
  - a. Athletic Trainer
  - b. Assistant Athletic Trainer
    1. Staff
    2. Graduate Student
  - c. Student Athletic Trainer
  - d. Equipment Manager
  - e. Assistant Equipment Manager
  - f. Linen Worker
  
- 3. Burdick Hall Athletic Trainers**
  - a. Coordinators
  - b. Managers
  
- 4. TU Speech-Language-Hearing Clinic**
  - a. Faculty
  
- 5. TU Nursing Department**
  - a. Nurse (Faculty)
  
- 6. TU Occupational Therapy Department**
  - a. Faculty
  
- 7. TU Police Department**
  - a. Police Officer
    1. Sergeant
    2. Corporal
    3. Private First Class
    4. Police Aide
  
- 8. Department of Environmental Health and Safety**
  - a. Staff

**9. Facilities Management**

- a. Confined-space Entry Emergency Responders
  - 1.Steam Plant Personnel
  - 2.Electricians
  - 3.Plumbers
  - 4.Preventative Maintenance Personnel
- b. Area Maintenance

**10.Project MARJ**

- a. Staff
- b. Student Employees

**11.Child Care Facility**

- a. Staff



## **Appendix D: Campus Personnel in Program**

**Effective Date: 1/1/91**

**Revision #: 2**

**Revision Date: See Each Department**

**Memorandum**



Department of  
Environmental Health & Safety

Towson University  
8000 York Road  
Towson, MD 21252-0001

t. 410 704-2949  
f. 410 704-2993

To Supervisors  
From Rick Setzer, Environmental Safety Manager  
Date  
Re Departmental Personnel in the Bloodborne Pathogens Program  
CC

---

Enclosed is a copy of the training records for personnel in your department who have received Bloodborne pathogens training. Please update the list Adding new employees and deleting employees who are no longer working In your department. Please return the form to EHS by \_\_\_\_\_.

Thank you for your cooperation.

Enc.

## **Appendix F: Procedures for Receipt of Hepatitis B Vaccine**

**Effective Date: 2/17/92**  
**Revision #: 4**  
**Revision Date: 06/04/09**

**Memorandum**



Department of  
Environmental Health & Safety

Towson University  
8000 York Road  
Towson, MD 21252-0001

t. 410 704-2949  
f. 410 704-2993

To Supervisors  
From Rick Setzer, Environmental Safety Manager  
Date  
Re Hepatitis B Vaccine  
CC

---

Enclosed is a list of additional personnel in your department that are enrolled in the Bloodborne Pathogens Program and have received the required training. During the training each person received information regarding the vaccine that is being offered on campus. You will need to contact each employee, check the appropriate choice on the enclosed form and send the list to the University Health Center. After you have provided the information to the Health Center, please contact Matthias Goldstein to make the necessary arrangements for Receipt of the vaccine. Personnel who do not wish to receive the vaccine at this time Will need to complete the Hepatitis B Declination Form with the copies being sent to The departments indicated on the form. EH&S will supply these forms at your Request.

If you have any questions concerning this, please contact me at your earliest convenience. Thank you for your cooperation in this matter.



**Memorandum**



Department of  
Environmental Health & Safety

Towson University  
8000 York Road  
Towson, MD 21252-0001

t. 410 704-2949  
f. 410 704-2993

To:  
From: Rick Setzer, Environmental Safety Manager  
Date:  
Re: Hepatitis B Vaccine  
CC:

---

As part of the Occupational Exposure to Bloodborne Pathogens Standard (29 CRF 1910.1030), the Occupational Safety and Health Administration requires employers to offer a Hepatitis B vaccination series at no cost to all employees who perform duties that have the potential for occupational exposure. During the training that you have received, information was provided to you concerning the vaccine. If you decide to receive the vaccine, please contact your supervisor. They will compile a list of interested employees to provide to the Health Center. The Health Center will be responsible for administering the vaccine. As indicated in the training, the vaccine is a three shot series given at 0, 1, and 6 months. If you would like to receive the vaccine from an outside agency, please indicate this to your supervisor and contact Environmental Health and Safety immediately. Arrangements will have to be made with your physician concerning payment for the vaccine and the transfer of medical records to document that you have received the entire series. An interpretation by the Maryland Occupational Safety and Health Administration indicates that TU will be responsible for payment equal to the amount paid for the vaccine available through the Health Center. The remaining balance will be your responsibility. If you have received the vaccine prior to the effective date of the Standard, please provide the appropriate documentation to the TU Health Center. (Medical Release forms are available through the Health Center.) Unfortunately, you will not be reimbursed for the cost of the vaccine.

You are not required to receive the vaccine, but it is strongly recommended. If you do not wish to be vaccinated, you will be required to sign a Hepatitis B Vaccine Declination Form. The form is also a mandatory requirement of the Standard. A copy of this form is enclosed for your information. The

information will be provided to Environmental Health and Safety and the TU Health Center for record keeping purposes. As indicated on the form, if you decide to receive the vaccine at a later date, you may receive it at no cost provided you still perform duties that put you at risk of exposure.

If you have additional questions concerning the vaccine, please contact either the TU Health Center or the Department of Environmental Health and Safety as soon as possible.

Enc.



Environmental Health  
and Safety

Towson University  
8000 York Road  
Towson, MD 21252-0001

t. 410-704-2949  
f. 410-704-2993

### Hepatitis B Vaccine Declination Form

I, \_\_\_\_\_, understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with the Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Social Security Number \_\_\_\_\_

Supervisor's Name (Print) \_\_\_\_\_

This information is collected for documentation purposes only. Failure to provide this data may result in the improper identification of the individual participating in the activity. This information may be inspected, amended, or corrected by contacting the Department of Environmental Health & Safety. This information is generally not available for public inspection. It will be shared only with other departments at Towson University, the University System of MD, the State of Maryland, the U.S. federal government, and with other entities permitted by law and/or as authorized by you.

(White Copy - Environmental Health & Safety, Yellow Copy - Employee, Pink Copy - TU Health Center)





Date

Department of Environmental  
Health & Safety

Towson University  
8000 York Road  
Towson, MD 21252-0001

t. 410-704-2949  
f. 410-704-2993

Name  
Address

Dear Madam/Sir:

In accordance with the Occupational Safety and Health Administration's Standard dealing with Occupational Exposure to Bloodborne Pathogens (29 CFR 1910.1030), Towson University is offering the Hepatitis B Vaccine to all employees who perform duties with the potential for occupational exposure. The TU Health Center will be providing the Engerix-B vaccine to employees enrolled in the program. However, an employee may choose to receive the vaccination series from their personal physician. In this case, an interpretation from Maryland Occupational Safety and Health indicates that TU will only be responsible for payment equal to the cost for the series available through the Health Center (COST/SHOT for the three shot series). The employee must pay the balance. The enclosed medical release form must be completed by the attending physician and the information that is requested sent to the following address when the series is completed:

Dowell Health Center  
Towson University  
8000 York Road  
Towson, MD 21252-0001

Also, a bill for the vaccine (not to exceed COST/SERIES) charged to Towson University must be sent to the following address to ensure prompt payment:

Richard Setzer, Environmental Safety Manager  
Environmental Health & Safety  
Towson University  
8000 York Road  
Towson, MD 21252-0001

(2)

During the required training, the Engerix-B vaccine information was provided to the employee. If the physician is offering a different vaccine, they will be responsible for providing the appropriate product information.

If you have any questions concerning this, please feel free to contact me at your earliest convenience.

Sincerely,

Richard Setzer  
Environmental Safety Manager

**TOWSON UNIVERSITY**  
**STUDENT HEALTH SERVICE**  
Consent for Release of Information

1. I hereby authorize \_\_\_\_\_ to release  
Name of Institution, Clinic or Physician

the following information from the health record(s) of:

\_\_\_\_\_  
Patient's Name

\_\_\_\_\_  
Address

SS# \_\_\_\_\_ Birth date \_\_\_\_\_

covering the period(s) of treatment, hospitalization, etc. from:

Date \_\_\_\_\_ to Date \_\_\_\_\_

2. Information to be released:

\_\_\_\_\_ Copy of (complete) health record  
\_\_\_\_\_ History and Physical  
\_\_\_\_\_ Inpatient Unit Discharge Summary  
\_\_\_\_\_ **XX** Immunization Record -- **Hepatitis B Vaccination**  
\_\_\_\_\_ GYN. (Pap, Pelvic, Lab)  
\_\_\_\_\_ Other \_\_\_\_\_

3. Information is to be released to Provider Name: Dowell Health Center  
Towson University  
8000 York Road  
Towson, MD 21252-0001

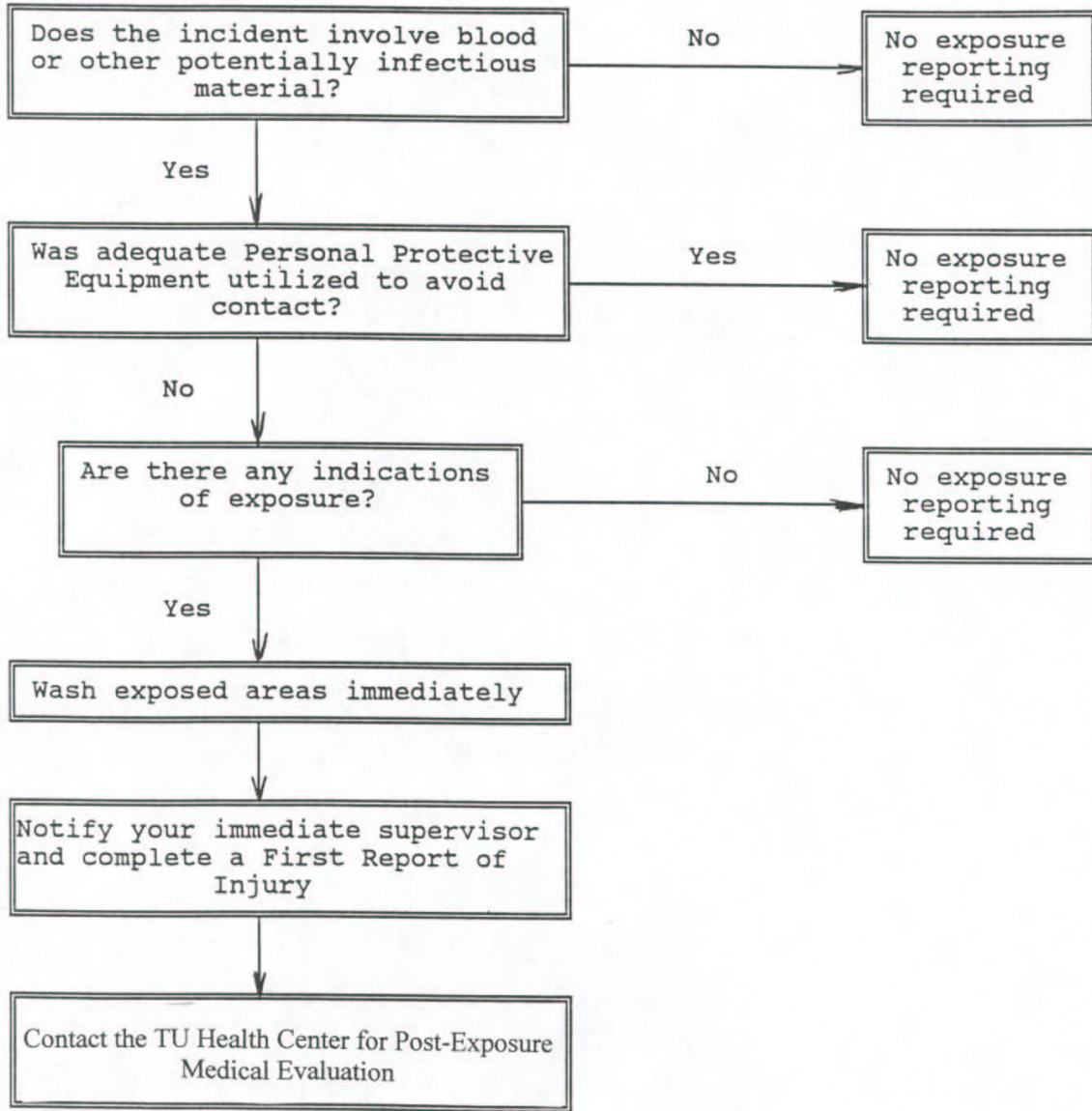
Signed \_\_\_\_\_ Date \_\_\_\_\_  
Patient

Signed \_\_\_\_\_ Date \_\_\_\_\_  
Witness

## **Appendix G: Procedures for Reporting an Incident**

**Effective Date: 1/1/91**  
**Revision #:0**  
**Revision Date:**

TU PROCEDURES FOR REPORTING AN EXPOSURE INCIDENT



## **Appendix H: Exposure Reporting Forms**

**Effective Date: 1/1/91**  
**Revision #: 1**  
**Revision Date: 4/28/98**



# Employee's Report of Injury/Occupational Illness

(Please complete this form and give original to your supervisor within 24 hours of the incident.)

PLEASE PRINT LEGIBLY

Employee's Name: \_\_\_\_\_ Sex: \_\_\_\_\_  
Last First Middle

Date of Birth: \_\_\_\_/\_\_\_\_/\_\_\_\_ Home Phone # ( ) \_\_\_\_\_ Work Phone # ( ) \_\_\_\_\_

Home Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Present job title: \_\_\_\_\_ Department: \_\_\_\_\_ Date of Hire: \_\_\_\_\_

Marital Status: \_\_\_\_\_ Number of Dependents: \_\_\_\_\_

Social Security No.: \_\_\_\_\_ Salary: \$ \_\_\_\_\_ Bi-weekly/hourly

Date and Time of Injury/Illness: \_\_\_\_\_ Time Workday Began: \_\_\_\_\_

Location where incident occurred: \_\_\_\_\_  
Building Area (hallway, etc.)

Describe fully how injury/illness occurred: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

(continue on other side, if necessary)

Describe bodily injury sustained (be specific about body part(s) affected): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

(continue on other side, if necessary)

Name(s) of Witness(es): \_\_\_\_\_

Recommendation on how to prevent this injury/illness from recurring: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Name of Supervisor: \_\_\_\_\_  
Last First Middle

Date & time reported the injury/illness to your supervisor \_\_\_\_\_

Signature of Employee: \_\_\_\_\_ Date: \_\_\_\_\_

INJURY.RPT  
4/28/98



## Supervisor's Report of Injury/Occupational Illness

(Please complete both sides of this form and return original to TU OHR along with original of Employees Report within 48 hours of the incident)

PLEASE PRINT LEGIBLY

Carrier: INJURED WORKERS INSURANCE FUND Policy #: 90223-6

Injured Employee: \_\_\_\_\_ SS#: \_\_\_\_\_  
Last First Middle

Employment Status: Regular \_\_\_\_\_ Contingent \_\_\_\_\_ Student \_\_\_\_\_ Department \_\_\_\_\_

Date and Time of Injury/Illness: \_\_\_\_\_ Time Workday Began: \_\_\_\_\_ a.m/p.m.

When were you informed of the injury/illness? \_\_\_\_\_

Location where incident occurred: \_\_\_\_\_  
Building Area (hallway, etc.)

Describe fully how injury/illness occurred: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(Attach additional sheet if necessary)

Describe bodily injury sustained (be specific about body part(s) affected): \_\_\_\_\_

\_\_\_\_\_

(Attach additional sheet if necessary)

Do you agree with the employee's version of the incident: Yes \_\_\_\_\_ No \_\_\_\_\_

If no, explain: \_\_\_\_\_

\_\_\_\_\_

(Attach additional sheet if necessary)

Medical Attention Given? Yes \_\_\_\_\_ No \_\_\_\_\_ By Whom? \_\_\_\_\_  
(Name & Address)

Was employee paid full pay for day of injury/illness? Yes \_\_\_\_\_ No \_\_\_\_\_

Any Lost Time? No \_\_\_\_\_ Yes \_\_\_\_\_ How much? \_\_\_\_\_

Has employee returned to work? No \_\_\_\_\_ Yes \_\_\_\_\_ If yes, Full Duty: \_\_\_\_\_ Modified Duty: \_\_\_\_\_

If modified duty, for how many days? \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

Name of Supervisor: \_\_\_\_\_ Position: \_\_\_\_\_ Work Phone #: \_\_\_\_\_

Signature of Supervisor: \_\_\_\_\_ Date: \_\_\_\_\_

SRI-RPT  
4/28/98



## SUPERVISOR'S REPORT OF INVESTIGATION OF INJURY/OCCUPATIONAL ILLNESS

AS A RESULT OF YOUR INVESTIGATION, CHECK BELOW ALL CAUSES WHICH CONTRIBUTED TO THIS INJURY/ILLNESS:

HOUSEKEEPING		OTHER	Unskilled Or Uninstructed
	Poor Planning		Unsuited To Job
	Unsafe Storage		Horseplay
	Untidy Working Area		Disregard Of Instructions
			Failure To Use Safeguards
			Improper Clothing
			Unsafe Loading, Stacking, Mixing
			Taking Unsafe Position/Posture
MAINTENANCE	Defective Machinery		Operate Without Authority
	Defective Equipment		Improper Use Of Equipment
	Temporary Hookup		Operating At Unsafe Speed
			Making Safety Device Inoperative
			Inattention To Surroundings
PHYSICAL SAFEGUARDS	Inadequate Machine Guards		Failure To Secure/Warn
	Inadequate Protective Equipment		Employee Required To Rush
	Inadequate Body Protection		Violation-Safety Rule #
			Unsafe Layout
SUPERVISION	Inadequate Training		Unsafe Methods
	Inadequate Direct Supervision		Insufficient Help
	Failure To Enforce Rules		Inadequate Equipment
	Lack Of Supervisory Foresight		Poor Lighting Or Ventilation
	Toleration Of Unsafe Practices		Safeguards Not Provided
			Protective Equipment Not Provided
			No Safe Practice Rules
	Congested Work Area		

### CONDITIONS AND CORRECTIVE ACTION TAKEN

Itemize Preventive Action You Recommend & Completion Date:		
What Action Have You Taken:		
Follow-Up Date On Action Taken:		
Supervisor	Title	Date

Exposure Reporting Form

A. Date of this report: \_\_\_\_\_ Date of Incident: \_\_\_\_\_

Name/Title: \_\_\_\_\_

Department: \_\_\_\_\_

Description of the reported exposure: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B. Supervisor's Name/Title: \_\_\_\_\_

Date of Notification: \_\_\_\_\_

Contact source of exposure is known: \_\_\_\_\_

Name of contact source: \_\_\_\_\_

Phone number: \_\_\_\_\_

Contact source of exposure is not known: \_\_\_\_\_

Supervisor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

C. Medical Director Notified of exposure: \_\_\_\_\_

If contact source of exposure is known:

Review of contact source's chart by: \_\_\_\_\_

Date of review: \_\_\_\_\_

Contact source laboratory test results:

SGOT: \_\_\_\_\_ HBsAg: \_\_\_\_\_ STS: \_\_\_\_\_ HIV: \_\_\_\_\_ Other: \_\_\_\_\_

Health-Care Provider's Health File

Reviewed by: \_\_\_\_\_

Date of review: \_\_\_\_\_

(continued on back)



## **Appendix I: Post-exposure Medical Monitoring Procedures**

**Effective Date: 1/1/91**  
**Revision #: 0**  
**Revision Date:**



Towson University  
 Department of Environmental Health & Safety  
 Towson, Maryland 21252-0001  
**INCIDENT REPORT**

Date of Incident:					Time Reported		Time Arrived		<input type="checkbox"/> Revised Report	
Reporting Unit		DRM Incident No.		Mo.	Day	Year	Day of week		Time of Incident	
Building Name:		Building No.		Name of Street					Zip Code	
Occupant Name (Person, Department, etc.)/Complainant Name							Telephone		Room or Apt.	
Owner Name (if Other than DRM)				Address (if Other than TSU)				Telephone (if Other)		
Method of Report From Public:			Type of Situation Found							
<input type="checkbox"/> Telephone <input type="checkbox"/> Work Control <input type="checkbox"/> Other:			<input type="checkbox"/> TSU PD							
Type of Action Taken										
No. Dept. Personnel Used At Scene			Equipment Used at Scene					Other Agency on Scene		
Number of Incident Related Injuries			Number of Incident Related Fatalities			Casualty Number			<input type="checkbox"/> Revised Report	
Casualty Last Name			First Name			MI	D.O.B.		Age	Time of Injury
Home Address								Telephone		
SEX		CASUALTY TYPE			SEVERITY		STATUS		AFFILIATION	
<input type="checkbox"/> Male <input type="checkbox"/> Female		1 <input type="checkbox"/> Fire Casualty 2 <input type="checkbox"/> Action Casualty 3 <input type="checkbox"/> EMS Casualty 4 <input type="checkbox"/> Other			1 <input type="checkbox"/> Injury 2 <input type="checkbox"/> Death		1 <input type="checkbox"/> Faculty/Staff 2 <input type="checkbox"/> Student 3 <input type="checkbox"/> Visitor		1 <input type="checkbox"/> Fire Service 2 <input type="checkbox"/> Other Emergency Personnel 3 <input type="checkbox"/> Civilian	
Condition Before Injury			Activity at Time of Injury				Cause of Injury			
Nature of Injury			Part of Body Injured				Disposition			
If Mobile Property			Year	Make	Model		Serial No.		License No. (if any)	
If Equipment Involved			Year	Make	Model		Serial No.		Voltage (if any)	
If Hazardous Material Involved							D.O.T. Class		Solid: _____ Liquid: _____ Gas: _____	
Name:										
DETAILS: _____										
_____										
_____										
_____										
_____										
_____										
_____										
_____										
TSU PD Incident Number			Person in Charge (Name, Position, Assignment)					Date		
BC PD Incident Number			Person Making Report (if Different From Above)					Date		

COMPLETE ON ALL INCIDENTS  
 Use Additional Forms for Each Casualty  
 COMPLETE AS APPROPRIATE  
 COMPLETE ON 2



## **VIII. PROTOCOL FOR BLOODBORNE PATHOGEN EXPOSURE INCIDENTS**

### **A. INDICATIONS FOR TESTING:**

Indications for testing include exposure to blood, semen, vaginal secretions or any body fluid visibly contaminated with blood by any of the following mechanisms:

1. Percutaneous injuries (needle sticks, cuts)
2. Contact with mucous membranes (eyes, mouth)
3. Contact with open wounds or skin that is chapped, abraded, or affected by dermatitis, or prolonged exposure to intact skin involving an extensive area or large quantities of blood or body fluids.

Determination of the need for testing should be confirmed by the Medical Director.

### **B. GENERAL PROCEDURES AFTER EXPOSURE**

1. The employee should wash the exposed area thoroughly with soap and water or other usual cleansing agent. Eyes and mouth should be rinsed thoroughly with saline or water.
2. The employee should immediately notify the supervisor and/or the Director of the Health Center about the incident. The Director will evaluate the employee and the source and determine the need for testing and the post-exposure management of the exposed employee (e.g. tetanus toxoid, immune globulin, or hepatitis B vaccine).
3. The source should be informed that his/her being tested would be valuable to the exposed employee. In no way should the source be made to feel harassed or coerced into being tested. If the source agrees to be tested, pre-test counselling and an informed consent form must be signed as required by Maryland law (see Section D).

### **C. TESTING OF SOURCE AND EXPOSED EMPLOYEE:**

1. Testing of the source: If willing, the source should always be tested for HIV. If the risk of viral hepatitis is high (patient has acute liver disease or is at high risk of being a HBsAg carrier), blood should also be obtained at the same time for Hepatitis B surface antigen (HBsAg), liver function studies, and Hepatitis A antigen testing, as recommended by the Director after review of the source's medical history and record. A separate consent form is not needed for hepatitis testing.
2. Testing of the exposed employee:
  - a. HIV Antibody testing: A baseline HIV antibody test should be offered to the exposed employee. If the source agrees to be tested for HIV, the employee must also be willing to undergo testing. Repeat HIV antibody testing will be made available to the employee at 6 weeks, and again at 3, 6, and 12 months.

- b. HBV immune status: If the source is unknown, or known to be at high risk of HBV infection, the employee should be tested for Hepatitis B immunity (HBsAb), regardless of whether the employee has previously been vaccinated against Hepatitis B.
3. The cost of testing the employee and the source will be borne by the State Accident Fund or University. Treatment costs of the exposed employee will be the responsibility of the State Accident Fund, including the cost of HBV vaccine, and any chemoprophylaxis for HIV exposure.

#### **D. INFORMED CONSENT AND COUNSELLING**

1. Informed consent by the source and the exposed employee is required by Maryland law prior to testing for HIV. Use the Department of Health and Mental Hygiene (DHMH) consent form.
2. Pre- and post-test counseling of the source and employee must be provided in conformance with Department of Health and Mental Hygiene requirements. The employee and the source will be counseled as to the nature and implications of the test, the fact that they will not be charged for the tests, and the confidentiality of the results as described below (See Section E). Positive test results must never be given over the phone.
3. As soon as possible after the exposure has occurred, the employee will also be counseled about the following:
  - a. Information about of the risk of transmission of HIV. If the risk is considered significant, the employee will be counseled to avoid potential transmission of the virus and to recognized symptoms associated with seroconversion.
  - b. Recommended monitoring procedures, including confidentiality of records and reporting requirements.
  - c. The availability of any medically-established post-exposure preventive treatment.
  - d. The availability of resources in the community.
  - e. Any other details available about the nature of the occupational exposure and how to prevent future exposure.
  - f. The University's AIDS policy.



## **E. CONFIDENTIALITY OF TEST RESULTS**

To maintain confidentiality, all HIV antibody testing will be done using a code number on the lab request form and specimen tube. The Medical Director's name should be on the lab slip so results will be sent directly to the Director in a confidential envelope. Hepatitis tests should be sent separately in the same manner as usual lab work.

1. Source test results:  
Test results for the source will be kept in a separate administrative file which cannot be released without the patient's written consent. If tests results are positive, the patient will be counseled and referred for follow-up care.
2. Exposed employee test results:  
Medical monitoring of the exposed employee shall be done in such a way as to protect the confidentiality of the exposed employee's identity and any lab test results. Results will be kept in a separate administrative file and not released without written consent. Positive results will not be reported to University authorities except on a need-to-know basis (e.g. for processing of worker's compensation claims, medical bills etc.). An employee with a positive HIV antibody test will be counselled and referred to an outside source of care.

## **F. REPORTING AND RECORD-KEEPING REQUIREMENTS**

The following forms must be filled out as soon as possible by the employee, supervisor or the Director.

1. A Worker's Compensation first report of injury must be filed with the EHS within 5 days of the occurrence. A separate Supervisor's first report of injury should also be filled out and sent to EHS
2. The supervisor of the exposed employee shall complete an Exposure Reporting Form to be kept in the Director's administrative file on occupational exposure to bloodborne pathogens. A copy should go to EHS and the employee.

## **G. POST-EXPOSURE INVESTIGATION AND WORKER EDUCATION**

Subsequent to a report of occupational exposure to bloodborne pathogens, the following actions will be taken:

1. An investigation will be made by the supervisor and the Director to determine:
  - a. factors contributing to the occurrence
  - b. the need for any changes in work practices or additional personal protective equipment
  - c. the need for training of personnel involved in tasks where contact with Bloodborne pathogens is a potential hazard.
2. Any recommended changes will be incorporated into the initial training of any new employee and annual retraining of existing employees, and communicated to staff at the next staff meeting.

**POST-EXPOSURE HEPATITIS MONITORING AND TREATMENT OF THE EMPLOYEE:**

The post-exposure treatment of an employee exposed to blood or body fluids via needle stick, ocular or other mucous membrane or percutaneous contact will vary, depending on the source's risk of Hepatitis B and non-A, non-B hepatitis, and the Hepatitis B immunity status of the exposed employee. HIV monitoring has been discussed under Section A above.

Refer to the chart below and treat as recommended.

\*\*\*\*\*

<b>HEPATITIS PROPHYLAXIS FOLLOWING EXPOSURE TO BLOOD</b>		
	<b>EXPOSED EMPLOYEE</b>	<b>HBV VACCINE STATUS:</b>
	<b>UNVACCINATED</b>	<b>VACCINATED</b>
<b>KNOWN SOURCE:</b>		
1. Abnormal LFT's	1. Give ISG (0.12ml/KG IM)	1. Give ISG (0.12ml/KG IM).
2. High-risk or HBsAg positive	1. Initiate HB vaccine series+ immediately. 2. If source HBsAg(+), give HBIG x 1*	1. Test for immune status to HBV. If not adequate, give HB vaccine booster+ and test source for HBsAg. If source HBsAg(+), also give HBIG x 1*. If immunity adequate, nothing required.
3. Low-risk or HbsAg negative	1. Initiate HBV vaccine series+	1. Nothing required
<b>UNKNOWN SOURCE:</b>	1. Give ISG (0.12ml/KG IM)  2. Test for HBsAb. If (-) initiate HBV vaccine series.+  3. If source high risk for HBV, give HBIG x 1*	1. Give ISG (0.12ml/KG IM)  2. Test for HBsAb. If immune status adequate no Rx needed. If immunity inadequate, give booster dose of vaccine.+ If source high risk, give HBIG x 1*

\*HBIG (0.06 ml/Kg) must be given within 7 days of exposure.

+HBV Vaccine series: 3 doses at 0,1,and 6 mo. post-exposure.

HBV Vaccine booster dose: 20ug IM.

Rev. 10-91 JLH

## **Appendix J: Employee Information, Training and Education**

**Effective Date: 1/1/91**  
**Revision #: 5**  
**Revision Date: 6/04/09**

## Instructors:

Dr. Jane Halpern  
TU Medical Officer  
Technical Assistance for Health Care Workers

Richard Setzer  
TU EHS's Environmental Safety Manager  
EHS Procedures

## Assisting Instructors:

Dr. Jacquelyn Jordan  
Nursing Chairperson  
Training Nursing Dept.

Terry O'Brien  
Athletic Dept  
Training Athletic Trainers

## Occupational Exposure to Bloodborne Pathogens

### Course Outline

- Overview of Regulations:  
29 CFR 1910.1030  
COMAR 09.12.37
- Recognition of tasks with potential occupational exposure
- Modes of transmission of bloodborne pathogens and diseases
- General information concerning HIV and HBV
- Availability of Vaccines
- Procedures for reporting an exposure incident
- Availability of post-exposure monitoring, counseling, and preventative treatment
- Personal Protective Equipment:  
Proper Selection, Use, and Limitations
- Universal Precautions for TU
- Spill Response
- Special Medical Waste removal
- (TUPD Scenarios)



## Occupational Exposure to Bloodborne Pathogens

### Training Verification Form

Please Print: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_

SS# or Employee ID#: \_\_\_\_\_

Department: \_\_\_\_\_ Job Title: \_\_\_\_\_

On the above date, I attended a training session on occupational exposure to bloodborne pathogens. The training included the following information:

1. Explanation of the Standard. A copy of the Standard can be obtained on the EHS website.
2. An explanation of Towson University's Exposure Control Plan. A copy of TU's Exposure Control Plan can be obtained on the EHS website.
3. An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident.
4. An explanation of the modes of transmission for bloodborne pathogens.
5. An explanation of the epidemiology and symptoms of some common high risk bloodborne pathogens.
6. An explanation of the use and limitations of engineering controls, work practices, and PPE.
7. An explanation and practice of "Universal Precautions".
8. An explanation of the basis for PPE selection.
9. An explanation of the types, uses, location, removal, handling, decontamination and disposal of PPE.
10. Information on the Hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge.
11. Information on the appropriate actions to take and persons to contact in the event of an exposure incident involving blood or OPIM.
12. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
13. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
14. An explanation of the signs and labels and/or color coding required by the standard and used at Towson University.
15. An opportunity for interactive questions and answers with the person conducting the training.

---

Employee Signature

---

Instructor Signature

This information is collected for documentation purposes only. Failure to provide this data may result in the improper identification of the individual participating in the activity. This information may be inspected, amended, or corrected by contacting the Department of Environmental Health & Safety. This information is generally not available for public inspection. It will be shared only with other departments at Towson University, the University System of MD, the State of Maryland, the U.S. federal government, and with other entities permitted by law and/or as authorized by you.



Environmental Health & Safety  
410-704-2949

### Bloodborne Pathogen Annual Training

Please Print:

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Social Security Number: \_\_\_\_\_

Title/Job: \_\_\_\_\_

Department: \_\_\_\_\_

On this date, I attended a training session dealing with occupational exposure to bloodborne pathogens. The training included a videotape, Bloodborne Pathogens: The Human Factor (Coastal), outlining the general requirements of the OSHA Standard and the following information specific to the policies of Towson University:

1. Location and availability of the TU Exposure Control Plan
2. Requirement for training
3. Updated information regarding occupational exposures
4. Hepatitis B Vaccine
5. Exposure reporting requirements

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Instructor Signature

This information is collected for documentation purposes only. Failure to provide this data may result in the improper identification of the individual participating in the activity. This information may be inspected, amended, or corrected by contacting the Department of Environmental Health & Safety. This information is generally not available for public inspection. It will be shared only with other departments at Towson University, the University System of MD, the State of Maryland, the U.S. federal government, and with other entities permitted by law and/or as authorized by you.

## **Appendix K: Special Medical Waste Disposal Procedures**



**Effective Date: 1/1/91**  
**Revision #: 3**  
**Revision Date: 04/06/09**



**SPECIAL  
MEDICAL WASTE  
PROGRAM**

**Department of Environmental Health & Safety**

Phone: (410) 704-2949  
Fax: (410) 704-2993  
Emergency: (410) 704-4444  
Email: [Safety@towson.edu](mailto:Safety@towson.edu)  
Website: [www.towson.edu/ehs/index.html](http://www.towson.edu/ehs/index.html)

**REVISED MARCH 2004  
REVISED APRIL 2009**

## **PATHOLOGICAL/BIOLOGICAL/INFECTIOUS WASTES**

This document details the steps to be taken for the Towson University Community to comply with the Code of Maryland Regulation (COMAR) Title 26, Subtitle 13 Chapter 11 Special Medical Waste (SMW), and COMAR Title 10, Subtitle 6, Chapter 6 Diseases. Both of the regulations are complementary. Each regulation was written by a different state agency. Title 26 is promulgated by the Maryland Department of the Environment, and Title 10 is promulgated by the Maryland Department of Health and Mental Hygiene. The regulations essentially parallel the currently existing state hazardous waste (CHS) regulations in that each generator and transporter of SMW must apply for an additional state identification number and must use SMW permitted transport vehicles. SMW may only be disposed of via state licensed SMW disposal facilities. Landfilling of SMW is strictly prohibited. The following material is to be classified as Special Medical Waste (SMW) and dealt with in accordance with the above noted regulations:

1. Blood (animal or human) or blood soiled articles;
2. Anatomical materials (animal or human);
3. Microbiological laboratory waste;
4. Contaminated materials; or
5. Sharps (needles, syringes, surgical instruments, etc.).

### **I. GENERAL INFORMATION PERTAINING TO THE SMW REGULATIONS**

Emergency regulations governing the handling, treatment and disposal of special medical waste went into effect on September 30, 1988. Major features of the new regulations are highlighted here.

#### 1. WHAT IS SPECIAL MEDICAL WASTE?

Special Medical Waste (SMW) is defined by the regulations as anatomical material, blood or blood soiled articles, contaminated material (contaminated feces or articles contaminated with infectious agents), microbiological laboratory waste, needles, sharps, and syringes.

2. WHO MUST FOLLOW THE REGULATIONS?

Any person who generates SMW in the normal course of business must follow the DHMH regulations for handling, treatment, and disposal of SMW (COMAR 10.06.06); any company/individual who generates more than 110 pounds of SMW must follow the Maryland Department of Environment (MDE) regulations for hauling and disposal of SMW (COMAR 26.13.11 et seq.).

3. WHAT IS THE DIFFERENCE BETWEEN "HANDLING" AND "TREATMENT" OF SMW?

"Handling" refers to handling or maintaining the SMW immediately after it is generated and before it is "treated" or hauled away for treatment. "Treatment" refers to the process of assuring that the SMW is not infectious.

4. WHAT ARE THE REQUIREMENTS FOR HANDLING OF SMW?

Blood, anatomical and contaminated materials must be placed in a leak proof container to prevent spillage. Sharps, needles and syringes must be placed in a container that is impervious to puncture.

5. WHAT ARE THE REQUIREMENTS FOR TREATMENT OF SMW?

The regulations allow several different methods of treatment for each type of SMW. Liquid blood may be deposited in a sanitary sewage system (flushed in toilet), incinerated, autoclaved, or chemically disinfected. Blood-soiled articles may be incinerated, autoclaved or chemically disinfected. Anatomical materials may be buried, cremated, mechanically destroyed and deposited in sanitary sewer (grinding and flushing), or incinerated.

Needles, sharps, and syringes may be incinerated, autoclaved, or chemically disinfected. If treatment is by incineration or chemical disinfection, needles, sharps and syringes must be mechanically destroyed prior to disposal. -- Contaminated materials must be incinerated, autoclaved, or chemically disinfected.

6. WHAT ABOUT DISPOSAL OF SMW AFTER IT HAS BEEN TREATED?

If you generate less than 110 pounds of SMW, after treatment, you may dispose of SMW in accordance with local and State laws and regulations. If you generate more than 110 pounds of SMW per month, you must comply with regulations (if appropriate) for manifesting, packaging, transporting, recordkeeping and reporting.

7. WHAT ARE THE PENALTIES FOR NON-COMPLIANCE?

Under DHMH regulations, the Secretary may fine any person who violates the regulations up to \$500 per day of the violation. In addition, the Secretary may suspend, revoke or suspend any license, permit or certificate issued to any person who violates the regulations.

FOR MORE INFORMATION, OR A COPY OF THE DHMH REGULATION, PLEASE CONTACT THE DEPARTMENT OF ENVIRONMENTAL HEALTH & SAFETY AT (410) 704-2949.

**II. DISPOSAL PROCEDURES FOR SMW:**

Individual generators of SMW at TU will ensure that all SMW is disposed Of in accordance with this procedure. New employees should undergo training on these procedures prior to handling SMW.

The following identifies the proper receptacle(s) for specific SMW:

**BLOOD AND BLOOD SOAKED MATERIALS:**

1. Must be placed into leakproof plastic containers, properly labeled as containing biohazardous material. This material will be collected by the SMW disposal contractor.
2. This material may also be disposed of by either: a. If in liquid form, may be deposited into a sanitary sewer; or b. Incinerated c. Autoclaving; or d. Chemical disinfection. If treated by above noted method b., c., or d., then it may be disposed of as domestic solid waste.

**ANATOMICAL MATERIALS:**

1. Must be placed into leakproof (minimum 3 mil thick) plastic bag, which is properly labeled as containing biohazardous material. This material will be stored in an approved, appropriately labelled cardboard box which will be picked up for collection by the SMW disposal contractor when full.
2. Bags must be placed in rigid containers which are clearly labeled as containing biohazardous material; and
3. If the container is to be reused for any purpose, it must be

disinfected prior to reuse. The agent be used in such a manner as to assure the eradication of any biological agent that may have remained within the container.

4. May be treated and disposed only by: a. Interment; or b. Cremation; or c. Incineration followed, by disposal as domestic solid waste.

## **CLINICAL MICROBIOLOGICAL LABORATORY WASTE/CONTAMINATED MATERIALS:**

This section entails the following categories of SMW: a.) Feces or other body fluids from an individual diagnosed as having, or suspected of having, a disease capable of being transmitted to another human through the feces or other body fluid; b.) An article soiled with feces or other body fluid from an individual diagnosed as having, or suspected of having, a disease capable of being transmitted to another human through the feces or other body fluid.

1. Must be placed in leakproof bags of at least 3 mils thickness; and
2. Bags must be placed in rigid containers clearly labeled that they contain biohazardous material, and
3. If rigid containers are to be reused, they must be disinfected prior to reuse; and
4. May be disposed of by: a. If fecal material, deposited down a sanitary sewer; or b. Incineration; or c. Autoclaving; or d. Chemical disinfection; and e. Disposing of as solid domestic waste.

## **SHARPS:**

1. Must be placed in a puncture proof container which is clearly labeled as containing biohazardous materials.
2. Full sharps containers will be placed into appropriate SMW solid waste containers for proper disposal.

## **SPECIFIC TU HEALTH CENTER & TOWSON CENTER DISPOSAL PROCEDURES:**

- A. All treatment rooms, examining rooms, laboratories, restrooms, and Medical Records areas will have containers for the disposal of SMW. Each container will be properly labeled with a "Biohazard" sign have a properly functioning lid, which will be closed at all times unless in actual use, and will be made of metal, thick impervious heavy plastic, or thick cardboard. Each container will be lined with a red plastic biohazard bag. Care must be taken so the proper type of container is used. Sharps (Needles/puncture type items) are to be placed in the hard red plastic containers, which are labeled "Biohazard". Objects, such as gauze and bandages, are to be placed in the containers lined with red plastic biohazard bags.
- B. Items contaminated with blood and or body products and would not be able to puncture the plastic bag, are to be placed in the red "Biohazard" labeled plastic bag. These bags are to be placed in hard, covered containers. The lids on these containers must be closed at all times except when in actual use.
- C. Health Center and Training Room Staff will monitor Biohazard Containers and dispose of the them when they become 2/3 rd's full. This will assist in the prevention of employee exposure and contamination of the local area where the container is placed. Employees are also to use gloves at all times while working with potentially infectious material, and are to report all exposures to potentially infectious agents immediately to their supervisor.
- D. Laboratory coats, towels, cloth aprons, and/or bed lines that have become visibly soiled with blood or body fluids will be treated as being a biohazardous material. These items will be placed in a red biohazard plastic bag for proper disposal.

## **DECONTAMINATION:**

- A. Surfaces that have been contaminated with blood or body fluids must be properly decontaminated as soon as possible after the incident occurs. The area must be decontaminated with an agent strong enough to kill HIV and HBV, as well as other pathogens, such as Mycobacterium and streptococcus, to name a few. Decontamination can be performed by applying a mixture of 1 part bleach and 9 parts water to the area and allowing it to stand for 20 minutes. The surface is then to be cleansed with soap and water. This mixture can be no older than 1 hour when used. Another type of solution or commercial product may be used in place of the bleach solution, as long as it can document that it is effective against HBV, HIV, and other bloodborne pathogens. Gloves must be worn when an area is being decontaminated, and eye protection is to be worn if there is any likelihood of splash. All materials used to clean the area must be disposed of as SMW when appropriate, or decontaminated in the same manner as was the originally contaminated area.

- B. Laboratory jackets that become soiled with visible blood or body fluids must be placed in a plastic biohazard labeled bag for proper disposal or decontamination. At this time, TU will be disposing the jackets as SMW.
- C. Contaminated non-disposable safety equipment will be decontaminated in accordance to section A above. This would include such items as pocket respirators used in CPR, bag-valve masks, goggles, face shields, and the like.
- D. Contaminated disposable items, such as, gloves, paper aprons ,and surgical masks, will be disposed off in the proper receptacle used for SMW.

Additional SMW containers and bags can be obtained upon request by contacting The Department of Environmental Health & Safety. These are supplied by the SMW Disposal Contractor.



## **Appendix L: Applicable Regulations**

**1910.1030(a)**

***Scope and Application.*** This section applies to all occupational exposure to blood or other potentially infectious materials as defined by paragraph (b) of this section.

**1910.1030(b)**

***Definitions.*** For purposes of this section, the following shall apply:

***Assistant Secretary*** means the Assistant Secretary of Labor for Occupational Safety and Health, or designated representative.

***Blood*** means human blood, human blood components, and products made from human blood.

***Bloodborne Pathogens*** means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

***Clinical Laboratory*** means a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

***Contaminated*** means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

***Contaminated Laundry*** means laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

***Contaminated Sharps*** means any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

***Decontamination*** means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

***Director*** means the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designated representative.

***Engineering Controls*** means controls (e.g., sharps disposal containers, self-sheathing needles, safer medical devices, such as sharps with engineered sharps injury protections and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

***Exposure Incident*** means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

**Handwashing Facilities** means a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

**Licensed Healthcare Professional** is a person whose legally permitted scope of practice allows him or her to independently perform the activities required by paragraph (f) Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.

**HBV** means hepatitis B virus.

**HIV** means human immunodeficiency virus.

**Needleless systems** means a device that does not use needles for:

(1) The collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established; (2) The administration of medication or fluids; or (3) Any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

**Occupational Exposure** means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

**Other Potentially Infectious Materials** means (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

**Parenteral** means piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

**Personal Protective Equipment** is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

**Production Facility** means a facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.

**Regulated Waste** means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other

potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

**Research Laboratory** means a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

**Sharps with engineered sharps injury protections** means a nonneedle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

**Source Individual** means any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinic patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

**Sterilize** means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

**Universal Precautions** is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

**Work Practice Controls** means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

**1910.1030(c)**

***Exposure Control --***

**1910.1030(c)(1)**

***Exposure Control Plan.***

**1910.1030(c)(1)(i)**

Each employer having an employee(s) with occupational exposure as defined by paragraph (b) of this section shall establish a written Exposure Control Plan designed to eliminate or minimize employee exposure.

**1910.1030(c)(1)(ii)**

The Exposure Control Plan shall contain at least the following elements:

**1910.1030(c)(1)(ii)(A)**

The exposure determination required by paragraph (c)(2),

**1910.1030(c)(1)(ii)(B)**

The schedule and method of implementation for paragraphs (d) Methods of Compliance, (e) HIV and HBV Research Laboratories and Production Facilities, (f) Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up, (g) Communication of Hazards to Employees,

and (h) Recordkeeping, of this standard, and

**1910.1030(c)(1)(ii)(C)**

The procedure for the evaluation of circumstances surrounding exposure incidents as required by paragraph (f)(3)(i) of this standard.

**1910.1030(c)(1)(iii)**

Each employer shall ensure that a copy of the Exposure Control Plan is accessible to employees in accordance with 29 CFR 1910.1020(e).

**1910.1030(c)(1)(iv)**

The Exposure Control Plan shall be reviewed and updated at least annually and whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure. The review and update of such plans shall also:

**1910.1030(c)(1)(iv)(A)**

Reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens; and

**1910.1030(c)(1)(iv)(B)**

Document annually consideration and implementation of appropriate commercially available and effective safer medical devices designed to eliminate or minimize occupational exposure.

**1910.1030(c)(1)(v)**

An employer, who is required to establish an Exposure Control Plan shall solicit input from non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls and shall document the solicitation in the Exposure Control Plan.

**1910.1030(c)(1)(vi)**

The Exposure Control Plan shall be made available to the Assistant Secretary and the Director upon request for examination and copying.

**1910.1030(c)(2)**

***Exposure Determination.***

**1910.1030(c)(2)(i)**

Each employer who has an employee(s) with occupational exposure as defined by paragraph (b) of this section shall prepare an exposure determination. This exposure determination shall contain the following:

**1910.1030(c)(2)(i)(A)**

A list of all job classifications in which all employees in those job classifications have occupational exposure;

**1910.1030(c)(2)(i)(B)**

A list of job classifications in which some employees have occupational exposure, and

**1910.1030(c)(2)(i)(C)**

A list of all tasks and procedures or groups of closely related task and procedures in which occupational exposure occurs and that are performed by employees in job classifications listed in accordance with the provisions of paragraph (c)(2)(i)(B) of this standard.

**1910.1030(c)(2)(ii)**

This exposure determination shall be made without regard to the use of personal protective equipment.

**1910.1030(d)**

*Methods of Compliance --*

**1910.1030(d)(1)**

*General.* Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

**1910.1030(d)(2)**

*Engineering and Work Practice Controls.*

**1910.1030(d)(2)(i)**

Engineering and work practice controls shall be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used.

**1910.1030(d)(2)(ii)**

Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

**1910.1030(d)(2)(iii)**

Employers shall provide handwashing facilities which are readily accessible to employees.

**1910.1030(d)(2)(iv)**

When provision of handwashing facilities is not feasible, the employer shall provide either an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands shall be washed with soap and running water as soon as feasible.

**1910.1030(d)(2)(v)**

Employers shall ensure that employees wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment.

**1910.1030(d)(2)(vi)**

Employers shall ensure that employees wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.

**1910.1030(d)(2)(vii)**

Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed except as noted in paragraphs (d)(2)(vii)(A) and (d)(2)(vii)(B) below. Shearing or breaking of contaminated needles is prohibited.

**1910.1030(d)(2)(vii)(A)**

Contaminated needles and other contaminated sharps shall not be bent, recapped or removed unless the employer can demonstrate that no alternative is feasible or that such action is required by a specific medical or dental procedure.

**1910.1030(d)(2)(vii)(B)**

Such bending, recapping or needle removal must be accomplished through the use of a mechanical device or a one-handed technique.

**1910.1030(d)(2)(viii)**

Immediately or as soon as possible after use, contaminated reusable sharps shall be placed in appropriate containers until properly reprocessed. These containers shall be:

**1910.1030(d)(2)(viii)(A)**

Puncture resistant;

**1910.1030(d)(2)(viii)(B)**

Labeled or color-coded in accordance with this standard;

**1910.1030(d)(2)(viii)(C)**

Leakproof on the sides and bottom; and

**1910.1030(d)(2)(viii)(D)**

In accordance with the requirements set forth in paragraph (d)(4)(ii)(E) for reusable sharps.

**1910.1030(d)(2)(ix)**

Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.

**1910.1030(d)(2)(x)**

Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or other potentially infectious materials are present.

**1910.1030(d)(2)(xi)**

All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.

**1910.1030(d)(2)(xii)**

Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

**1910.1030(d)(2)(xiii)**

Specimens of blood or other potentially infectious materials shall be placed in a container which prevents leakage during collection, handling, processing, storage, transport, or shipping.

**1910.1030(d)(2)(xiii)(A)**

The container for storage, transport, or shipping shall be labeled or color-coded according to paragraph (g)(1)(i) and closed prior to being stored, transported, or shipped. When a facility utilizes Universal Precautions in the handling of all specimens, the labeling/color-coding of specimens is not necessary provided containers are recognizable as containing specimens. This exemption only applies while such specimens/containers remain within the facility. Labeling or color-coding in accordance with paragraph (g)(1)(i) is required when such specimens/containers leave the facility.

**1910.1030(d)(2)(xiii)(B)**

If outside contamination of the primary container occurs, the primary container shall be placed within a second container which prevents leakage during handling, processing, storage, transport, or shipping and is labeled or color-coded according to the requirements of this standard.

**1910.1030(d)(2)(xiii)(C)**

If the specimen could puncture the primary container, the primary container shall be placed within a secondary container which is puncture-resistant in addition to the above characteristics.

**1910.1030(d)(2)(xiv)**

Equipment which may become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary, unless the employer can demonstrate that decontamination of such equipment or portions of such equipment is not feasible.

**1910.1030(d)(2)(xiv)(A)**

A readily observable label in accordance with paragraph (g)(1)(i)(H) shall be attached to the equipment stating which portions remain contaminated.

**1910.1030(d)(2)(xiv)(B)**

The employer shall ensure that this information is conveyed to all affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping so that appropriate precautions will be taken.

**1910.1030(d)(3)**

***Personal Protective Equipment --***

**1910.1030(d)(3)(i)**

***Provision.*** When there is occupational exposure, the employer shall provide, at no cost to the employee, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. Personal protective equipment will be considered "appropriate" only if it does not permit blood or other potentially infectious materials to pass through to or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

**1910.1030(d)(3)(ii)**

***Use.*** The employer shall ensure that the employee uses appropriate personal protective equipment unless the employer shows that the employee temporarily and briefly declined to use personal protective equipment when, under rare and extraordinary circumstances, it was the employee's professional judgment that in the specific instance its use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to the safety of the worker or co-worker. When the employee makes this judgement, the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future.

**1910.1030(d)(3)(iii)**

***Accessibility.*** The employer shall ensure that appropriate personal protective equipment in the appropriate sizes is readily accessible at the worksite or is issued to employees. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

**1910.1030(d)(3)(iv)**

***Cleaning, Laundering, and Disposal.*** The employer shall clean, launder, and dispose of personal protective equipment required by paragraphs (d) and (e) of this standard, at no cost to the employee.

**1910.1030(d)(3)(v)**

***Repair and Replacement.*** The employer shall repair or replace personal protective equipment as needed to maintain its effectiveness, at no cost to the employee.

**1910.1030(d)(3)(vi)**

If a garment(s) is penetrated by blood or other potentially infectious materials, the garment(s) shall be removed immediately or as soon as feasible.

**1910.1030(d)(3)(vii)**

All personal protective equipment shall be removed prior to leaving the work area.

**1910.1030(d)(3)(viii)**

When personal protective equipment is removed it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.

**1910.1030(d)(3)(ix)**

***Gloves.*** Gloves shall be worn when it can be reasonably anticipated that the employee may



have hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; when performing vascular access procedures except as specified in paragraph (d)(3)(ix)(D); and when handling or touching contaminated items or surfaces.

**1910.1030(d)(3)(ix)(A)**

Disposable (single use) gloves such as surgical or examination gloves, shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

**1910.1030(d)(3)(ix)(B)**

Disposable (single use) gloves shall not be washed or decontaminated for re-use.

**1910.1030(d)(3)(ix)(C)**

Utility gloves may be decontaminated for re-use if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

**1910.1030(d)(3)(ix)(D)**

If an employer in a volunteer blood donation center judges that routine gloving for all phlebotomies is not necessary then the employer shall:

**1910.1030(d)(3)(ix)(D)(1)**

Periodically reevaluate this policy;

**1910.1030(d)(3)(ix)(D)(2)**

Make gloves available to all employees who wish to use them for phlebotomy;

**1910.1030(d)(3)(ix)(D)(3)**

Not discourage the use of gloves for phlebotomy; and

**1910.1030(d)(3)(ix)(D)(4)**

Require that gloves be used for phlebotomy in the following circumstances:

**1910.1030(d)(3)(ix)(D)(4)(i)**

When the employee has cuts, scratches, or other breaks in his or her skin;

**1910.1030(d)(3)(ix)(D)(4)(ii)**

When the employee judges that hand contamination with blood may occur, for example, when performing phlebotomy on an uncooperative source individual; and

**1910.1030(d)(3)(ix)(D)(4)(iii)**

When the employee is receiving training in phlebotomy.

**1910.1030(d)(3)(x)**

***Masks, Eye Protection, and Face Shields.*** Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

**1910.1030(d)(3)(xi)**

***Gowns, Aprons, and Other Protective Body Clothing.*** Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar outer garments shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

**1910.1030(d)(3)(xii)**

Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated (e.g., autopsies, orthopaedic surgery).

**1910.1030(d)(4)**

***Housekeeping --***

**1910.1030(d)(4)(i)**

**General.** Employers shall ensure that the worksite is maintained in a clean and sanitary condition. The employer shall determine and implement an appropriate written schedule for cleaning and method of decontamination based upon the location within the facility, type of surface to be cleaned, type of soil present, and tasks or procedures being performed in the area.

**1910.1030(d)(4)(ii)**

All equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials.

**1910.1030(d)(4)(ii)(A)**

Contaminated work surfaces shall be decontaminated with an appropriate disinfectant after completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning.

**1910.1030(d)(4)(ii)(B)**

Protective coverings, such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment and environmental surfaces, shall be removed and replaced as soon as feasible when they become overtly contaminated or at the end of the workshift if they may have become contaminated during the shift.

**1910.1030(d)(4)(ii)(C)**

All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.

**1910.1030(d)(4)(ii)(D)**

Broken glassware which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.

**1910.1030(d)(4)(ii)(E)**

Reusable sharps that are contaminated with blood or other potentially infectious materials shall not be stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.

**1910.1030(d)(4)(iii)**

***Regulated Waste --***

**1910.1030(d)(4)(iii)(A)**

***Contaminated Sharps Discarding and Containment.***

**1910.1030(d)(4)(iii)(A)(1)**

Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:

**1910.1030(d)(4)(iii)(A)(1)(i)**

Closable;

**1910.1030(d)(4)(iii)(A)(1)(ii)**

Puncture resistant;

**1910.1030(d)(4)(iii)(A)(1)(iii)**

Leakproof on sides and bottom; and

**1910.1030(d)(4)(iii)(A)(1)(iv)**

Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard.

**1910.1030(d)(4)(iii)(A)(2)**

During use, containers for contaminated sharps shall be:

**1910.1030(d)(4)(iii)(A)(2)(i)**

Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries);

**1910.1030(d)(4)(iii)(A)(2)(ii)**

Maintained upright throughout use; and

**1910.1030(d)(4)(iii)(A)(2)(iii)**

Replaced routinely and not be allowed to overfill.

**1910.1030(d)(4)(iii)(A)(3)**

When moving containers of contaminated sharps from the area of use, the containers shall be:

**1910.1030(d)(4)(iii)(A)(3)(i)**

Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;

**1910.1030(d)(4)(iii)(A)(3)(ii)**

Placed in a secondary container if leakage is possible. The second container shall be:

**1910.1030(d)(4)(iii)(A)(3)(ii)(A)**

Closable;

**1910.1030(d)(4)(iii)(A)(3)(ii)(B)**

Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and

**1910.1030(d)(4)(iii)(A)(3)(ii)(C)**

Labeled or color-coded according to paragraph (g)(1)(i) of this standard.

**1910.1030(d)(4)(iii)(A)(4)**

Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.

**1910.1030(d)(4)(iii)(B)**

*Other Regulated Waste Containment --*

**1910.1030(d)(4)(iii)(B)(1)**

Regulated waste shall be placed in containers which are:

**1910.1030(d)(4)(iii)(B)(1)(i)**

Closable;

**1910.1030(d)(4)(iii)(B)(1)(ii)**

Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

**1910.1030(d)(4)(iii)(B)(1)(iii)**

Labeled or color-coded in accordance with paragraph (g)(1)(i) this standard; and

**1910.1030(d)(4)(iii)(B)(1)(iv)**

Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

**1910.1030(d)(4)(iii)(B)(2)**

If outside contamination of the regulated waste container occurs, it shall be placed in a

second container. The second container shall be:

**1910.1030(d)(4)(iii)(B)(2)(i)**

Closable;

**1910.1030(d)(4)(iii)(B)(2)(ii)**

Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

**1910.1030(d)(4)(iii)(B)(2)(iii)**

Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard; and

**1910.1030(d)(4)(iii)(B)(2)(iv)**

Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

**1910.1030(d)(4)(iii)(C)**

Disposal of all regulated waste shall be in accordance with applicable regulations of the United States, States and Territories, and political subdivisions of States and Territories.

**1910.1030(d)(4)(iv)**

***Laundry.***

**1910.1030(d)(4)(iv)(A)**

Contaminated laundry shall be handled as little as possible with a minimum of agitation.

**1910.1030(d)(4)(iv)(A)(1)**

Contaminated laundry shall be bagged or containerized at the location where it was used and shall not be sorted or rinsed in the location of use.

**1910.1030(d)(4)(iv)(A)(2)**

Contaminated laundry shall be placed and transported in bags or containers labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard. When a facility utilizes Universal Precautions in the handling of all soiled laundry, alternative labeling or color-coding is sufficient if it permits all employees to recognize the containers as requiring compliance with Universal Precautions.

**1910.1030(d)(4)(iv)(A)(3)**

Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through or leakage from the bag or container, the laundry shall be placed and transported in bags or containers which prevent soak-through and/or leakage of fluids to the exterior.

**1910.1030(d)(4)(iv)(B)**

The employer shall ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment.

**1910.1030(d)(4)(iv)(C)**

When a facility ships contaminated laundry off-site to a second facility which does not utilize Universal Precautions in the handling of all laundry, the facility generating the contaminated laundry must place such laundry in bags or containers which are labeled or color-coded in accordance with paragraph (g)(1)(i).

**1910.1030(e)**

***HIV and HBV Research Laboratories and Production Facilities.***

**1910.1030(e)(1)**

This paragraph applies to research laboratories and production facilities engaged in the culture, production, concentration, experimentation, and manipulation of HIV and HBV. It does not apply to clinical or diagnostic laboratories engaged solely in the analysis of blood, tissues, or organs. These requirements apply in addition to the other requirements of the

standard.

**1910.1030(e)(2)**

Research laboratories and production facilities shall meet the following criteria:

**1910.1030(e)(2)(i)**

***Standard Microbiological Practices.*** All regulated waste shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens.

**1910.1030(e)(2)(ii)**

***Special Practices.***

**1910.1030(e)(2)(ii)(A)**

Laboratory doors shall be kept closed when work involving HIV or HBV is in progress.

**1910.1030(e)(2)(ii)(B)**

Contaminated materials that are to be decontaminated at a site away from the work area shall be placed in a durable, leakproof, labeled or color-coded container that is closed before being removed from the work area.

**1910.1030(e)(2)(ii)(C)**

Access to the work area shall be limited to authorized persons. Written policies and procedures shall be established whereby only persons who have been advised of the potential biohazard, who meet any specific entry requirements, and who comply with all entry and exit procedures shall be allowed to enter the work areas and animal rooms.

**1910.1030(e)(2)(ii)(D)**

When other potentially infectious materials or infected animals are present in the work area or containment module, a hazard warning sign incorporating the universal biohazard symbol shall be posted on all access doors. The hazard warning sign shall comply with paragraph (g)(1)(ii) of this standard.

**1910.1030(e)(2)(ii)(E)**

All activities involving other potentially infectious materials shall be conducted in biological safety cabinets or other physical-containment devices within the containment module. No work with these other potentially infectious materials shall be conducted on the open bench.

**1910.1030(e)(2)(ii)(F)**

Laboratory coats, gowns, smocks, uniforms, or other appropriate protective clothing shall be used in the work area and animal rooms. Protective clothing shall not be worn outside of the work area and shall be decontaminated before being laundered.

**1910.1030(e)(2)(ii)(G)**

Special care shall be taken to avoid skin contact with other potentially infectious materials. Gloves shall be worn when handling infected animals and when making hand contact with other potentially infectious materials is unavoidable.

**1910.1030(e)(2)(ii)(H)**

Before disposal all waste from work areas and from animal rooms shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens.

**1910.1030(e)(2)(ii)(I)**

Vacuum lines shall be protected with liquid disinfectant traps and high-efficiency particulate air (HEPA) filters or filters of equivalent or superior efficiency and which are checked routinely and maintained or replaced as necessary.

**1910.1030(e)(2)(ii)(J)**

Hypodermic needles and syringes shall be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle-locking syringes or disposable syringe-needle units (i.e., the needle is integral to the syringe) shall be used for the injection or aspiration of other potentially infectious materials. Extreme caution shall be used when handling needles and syringes. A needle shall not be bent, sheared, replaced in the sheath or guard, or removed from the syringe following use. The needle and syringe shall be promptly placed in a puncture-resistant container and autoclaved or decontaminated before reuse or disposal.

**1910.1030(e)(2)(ii)(K)**

All spills shall be immediately contained and cleaned up by appropriate professional staff or others properly trained and equipped to work with potentially concentrated infectious materials.

**1910.1030(e)(2)(ii)(L)**

A spill or accident that results in an exposure incident shall be immediately reported to the laboratory director or other responsible person.

**1910.1030(e)(2)(ii)(M)**

A biosafety manual shall be prepared or adopted and periodically reviewed and updated at least annually or more often if necessary. Personnel shall be advised of potential hazards, shall be required to read instructions on practices and procedures, and shall be required to follow them.

**1910.1030(e)(2)(iii)**

***Containment Equipment.***

**1910.1030(e)(2)(iii)(A)**

Certified biological safety cabinets (Class I, II, or III) or other appropriate combinations of personal protection or physical containment devices, such as special protective clothing, respirators, centrifuge safety cups, sealed centrifuge rotors, and containment caging for animals, shall be used for all activities with other potentially infectious materials that pose a threat of exposure to droplets, splashes, spills, or aerosols.

**1910.1030(e)(2)(iii)(B)**

Biological safety cabinets shall be certified when installed, whenever they are moved and at least annually.

**1910.1030(e)(3)**

HIV and HBV research laboratories shall meet the following criteria:

**1910.1030(e)(3)(i)**

Each laboratory shall contain a facility for hand washing and an eye wash facility which is readily available within the work area.

**1910.1030(e)(3)(ii)**

An autoclave for decontamination of regulated waste shall be available.

**1910.1030(e)(4)**

HIV and HBV production facilities shall meet the following criteria:

**1910.1030(e)(4)(i)**

The work areas shall be separated from areas that are open to unrestricted traffic flow within the building. Passage through two sets of doors shall be the basic requirement for entry into the work area from access corridors or other contiguous areas. Physical separation of the high-containment work area from access corridors or other areas or activities may also be provided by a double-doored clothes-change room (showers may be included), airlock, or

other access facility that requires passing through two sets of doors before entering the work area.

**1910.1030(e)(4)(ii)**

The surfaces of doors, walls, floors and ceilings in the work area shall be water resistant so that they can be easily cleaned. Penetrations in these surfaces shall be sealed or capable of being sealed to facilitate decontamination.

**1910.1030(e)(4)(iii)**

Each work area shall contain a sink for washing hands and a readily available eye wash facility. The sink shall be foot, elbow, or automatically operated and shall be located near the exit door of the work area.

**1910.1030(e)(4)(iv)**

Access doors to the work area or containment module shall be self-closing.

**1910.1030(e)(4)(v)**

An autoclave for decontamination of regulated waste shall be available within or as near as possible to the work area.

**1910.1030(e)(4)(vi)**

A ducted exhaust-air ventilation system shall be provided. This system shall create directional airflow that draws air into the work area through the entry area. The exhaust air shall not be recirculated to any other area of the building, shall be discharged to the outside, and shall be dispersed away from occupied areas and air intakes. The proper direction of the airflow shall be verified (i.e., into the work area).

**1910.1030(e)(5)**

*Training Requirements.* Additional training requirements for employees in HIV and HBV research laboratories and HIV and HBV production facilities are specified in paragraph (g)(2)(ix).

**1910.1030(f)**

*Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up --*

**1910.1030(f)(1)**

*General.*

**1910.1030(f)(1)(i)**

The employer shall make available the hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up to all employees who have had an exposure incident.

**1910.1030(f)(1)(ii)**

The employer shall ensure that all medical evaluations and procedures including the hepatitis B vaccine and vaccination series and post-exposure evaluation and follow-up, including prophylaxis, are:

**1910.1030(f)(1)(ii)(A)**

Made available at no cost to the employee;

**1910.1030(f)(1)(ii)(B)**

Made available to the employee at a reasonable time and place;

**1910.1030(f)(1)(ii)(C)**

Performed by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional; and

**1910.1030(f)(1)(ii)(D)**

Provided according to recommendations of the U.S. Public Health Service current at the time

these evaluations and procedures take place, except as specified by this paragraph (f).

**1910.1030(f)(1)(iii)**

The employer shall ensure that all laboratory tests are conducted by an accredited laboratory at no cost to the employee.

**1910.1030(f)(2)**

***Hepatitis B Vaccination.***

**1910.1030(f)(2)(i)**

Hepatitis B vaccination shall be made available after the employee has received the training required in paragraph (g)(2)(vii)(I) and within 10 working days of initial assignment to all employees who have occupational exposure unless the employee has previously received the complete hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons.

**1910.1030(f)(2)(ii)**

The employer shall not make participation in a prescreening program a prerequisite for receiving hepatitis B vaccination.

**1910.1030(f)(2)(iii)**

If the employee initially declines hepatitis B vaccination but at a later date while still covered under the standard decides to accept the vaccination, the employer shall make available hepatitis B vaccination at that time.

**1910.1030(f)(2)(iv)**

The employer shall assure that employees who decline to accept hepatitis B vaccination offered by the employer sign the statement in Appendix A.

**1910.1030(f)(2)(v)**

If a routine booster dose(s) of hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster dose(s) shall be made available in accordance with section (f)(1)(ii).

**1910.1030(f)(3)**

***Post-exposure Evaluation and Follow-up.*** Following a report of an exposure incident, the employer shall make immediately available to the exposed employee a confidential medical evaluation and follow-up, including at least the following elements:

**1910.1030(f)(3)(i)**

Documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred;

**1910.1030(f)(3)(ii)**

Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law;

**1910.1030(f)(3)(ii)(A)**

The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the employer shall establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented.

**1910.1030(f)(3)(ii)(B)**

When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.

**1910.1030(f)(3)(ii)(C)**



Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

**1910.1030(f)(3)(iii)**

Collection and testing of blood for HBV and HIV serological status;

**1910.1030(f)(3)(iii)(A)**

The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained.

**1910.1030(f)(3)(iii)(B)**

If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.

**1910.1030(f)(3)(iv)**

Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service;

**1910.1030(f)(3)(v)**

Counseling; and

**1910.1030(f)(3)(vi)**

Evaluation of reported illnesses.

**1910.1030(f)(4)**

***Information Provided to the Healthcare Professional.***

**1910.1030(f)(4)(i)**

The employer shall ensure that the healthcare professional responsible for the employee's Hepatitis B vaccination is provided a copy of this regulation.

**1910.1030(f)(4)(ii)**

The employer shall ensure that the healthcare professional evaluating an employee after an exposure incident is provided the following information:

**1910.1030(f)(4)(ii)(A)**

A copy of this regulation;

**1910.1030(f)(4)(ii)(B)**

A description of the exposed employee's duties as they relate to the exposure incident;

**1910.1030(f)(4)(ii)(C)**

Documentation of the route(s) of exposure and circumstances under which exposure occurred;

**1910.1030(f)(4)(ii)(D)**

Results of the source individual's blood testing, if available; and

**1910.1030(f)(4)(ii)(E)**

All medical records relevant to the appropriate treatment of the employee including vaccination status which are the employer's responsibility to maintain.

**1910.1030(f)(5)**

***Healthcare Professional's Written Opinion.*** The employer shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation.

**1910.1030(f)(5)(i)**

The healthcare professional's written opinion for Hepatitis B vaccination shall be limited to

whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.

**1910.1030(f)(5)(ii)**

The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:

**1910.1030(f)(5)(ii)(A)**

That the employee has been informed of the results of the evaluation; and

**1910.1030(f)(5)(ii)(B)**

That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

**1910.1030(f)(5)(iii)**

All other findings or diagnoses shall remain confidential and shall not be included in the written report.

**1910.1030(f)(6)**

*Medical Recordkeeping.* Medical records required by this standard shall be maintained in accordance with paragraph (h)(1) of this section.

**1910.1030(g)**

*Communication of Hazards to Employees --*

**1910.1030(g)(1)**

*Labels and Signs --*

**1910.1030(g)(1)(i)**

*Labels.*

**1910.1030(g)(1)(i)(A)**

Warning labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material; and other containers used to store, transport or ship blood or other potentially infectious materials, except as provided in paragraph (g)(1)(i)(E), (F) and (G).

**1910.1030(g)(1)(i)(B)**

Labels required by this section shall include the following legend:



**1910.1030(g)(1)(i)(C)**

These labels shall be fluorescent orange or orange-red or predominantly so, with lettering and symbols in a contrasting color.

**1910.1030(g)(1)(i)(D)**

Labels shall be affixed as close as feasible to the container by string, wire, adhesive, or other

method that prevents their loss or unintentional removal.

**1910.1030(g)(1)(i)(E)**

Red bags or red containers may be substituted for labels.

**1910.1030(g)(1)(i)(F)**

Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion or other clinical use are exempted from the labeling requirements of paragraph (g).

**1910.1030(g)(1)(i)(G)**

Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal are exempted from the labeling requirement.

**1910.1030(g)(1)(i)(H)**

Labels required for contaminated equipment shall be in accordance with this paragraph and shall also state which portions of the equipment remain contaminated.

**1910.1030(g)(1)(i)(I)**

Regulated waste that has been decontaminated need not be labeled or color-coded.

**1910.1030(g)(1)(ii)**

***Signs.***

**1910.1030(g)(1)(ii)(A)**

The employer shall post signs at the entrance to work areas specified in paragraph (e), HIV and HBV Research Laboratory and Production Facilities, which shall bear the following legend:



(Name of the Infectious Agent)

(Special requirements for entering the area)

(Name, telephone number of the laboratory director or other responsible person.)

**1910.1030(g)(1)(ii)(B)**

These signs shall be fluorescent orange-red or predominantly so, with lettering and symbols in a contrasting color.

**1910.1030(g)(2)**

***Information and Training.***

**1910.1030(g)(2)(i)**

Employers shall ensure that all employees with occupational exposure participate in a training program which must be provided at no cost to the employee and during working hours.

**1910.1030(g)(2)(ii)**

Training shall be provided as follows:

**1910.1030(g)(2)(ii)(A)**

At the time of initial assignment to tasks where occupational exposure may take place;

**1910.1030(g)(2)(ii)(B)**

At least annually thereafter.

**1910.1030(g)(2)(iii)**

[Reserved]

**1910.1030(g)(2)(iv)**

Annual training for all employees shall be provided within one year of their previous training.

**1910.1030(g)(2)(v)**

Employers shall provide additional training when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created.

**1910.1030(g)(2)(vi)**

Material appropriate in content and vocabulary to educational level, literacy, and language of employees shall be used.

**1910.1030(g)(2)(vii)**

The training program shall contain at a minimum the following elements:

**1910.1030(g)(2)(vii)(A)**

An accessible copy of the regulatory text of this standard and an explanation of its contents;

**1910.1030(g)(2)(vii)(B)**

A general explanation of the epidemiology and symptoms of bloodborne diseases;

**1910.1030(g)(2)(vii)(C)**

An explanation of the modes of transmission of bloodborne pathogens;

**1910.1030(g)(2)(vii)(D)**

An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan;

**1910.1030(g)(2)(vii)(E)**

An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials;

**1910.1030(g)(2)(vii)(F)**

An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;

**1910.1030(g)(2)(vii)(G)**

Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment;

**1910.1030(g)(2)(vii)(H)**

An explanation of the basis for selection of personal protective equipment;

**1910.1030(g)(2)(vii)(I)**

Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;

**1910.1030(g)(2)(vii)(J)**

Information on the appropriate actions to take and persons to contact in an emergency

involving blood or other potentially infectious materials;

**1910.1030(g)(2)(vii)(K)**

An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available;

**1910.1030(g)(2)(vii)(L)**

Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident;

**1910.1030(g)(2)(vii)(M)**

An explanation of the signs and labels and/or color coding required by paragraph (g)(1); and

**1910.1030(g)(2)(vii)(N)**

An opportunity for interactive questions and answers with the person conducting the training session.

**1910.1030(g)(2)(viii)**

The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address.

**1910.1030(g)(2)(ix)**

Additional Initial Training for Employees in HIV and HBV Laboratories and Production Facilities. Employees in HIV or HBV research laboratories and HIV or HBV production facilities shall receive the following initial training in addition to the above training requirements.

**1910.1030(g)(2)(ix)(A)**

The employer shall assure that employees demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the facility before being allowed to work with HIV or HBV.

**1910.1030(g)(2)(ix)(B)**

The employer shall assure that employees have prior experience in the handling of human pathogens or tissue cultures before working with HIV or HBV.

**1910.1030(g)(2)(ix)(C)**

The employer shall provide a training program to employees who have no prior experience in handling human pathogens. Initial work activities shall not include the handling of infectious agents. A progression of work activities shall be assigned as techniques are learned and proficiency is developed. The employer shall assure that employees participate in work activities involving infectious agents only after proficiency has been demonstrated.

**1910.1030(h)**

*Recordkeeping --*

**1910.1030(h)(1)**

*Medical Records.*

**1910.1030(h)(1)(i)**

The employer shall establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29 CFR 1910.1020.

**1910.1030(h)(1)(ii)**

This record shall include:

**1910.1030(h)(1)(ii)(A)**

The name and social security number of the employee;

**1910.1030(h)(1)(ii)(B)**

A copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination as required by paragraph (f)(2);

**1910.1030(h)(1)(ii)(C)**

A copy of all results of examinations, medical testing, and follow-up procedures as required by paragraph (f)(3);

**1910.1030(h)(1)(ii)(D)**

The employer's copy of the healthcare professional's written opinion as required by paragraph (f)(5); and

**1910.1030(h)(1)(ii)(E)**

A copy of the information provided to the healthcare professional as required by paragraphs (f)(4)(ii)(B)(C) and (D).

**1910.1030(h)(1)(iii)**

Confidentiality. The employer shall ensure that employee medical records required by paragraph (h)(1) are:

**1910.1030(h)(1)(iii)(A)**

Kept confidential; and

**1910.1030(h)(1)(iii)(B)**

Not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by this section or as may be required by law.

**1910.1030(h)(1)(iv)**

The employer shall maintain the records required by paragraph (h) for at least the duration of employment plus 30 years in accordance with 29 CFR 1910.1020.

**1910.1030(h)(2)**

***Training Records.***

**1910.1030(h)(2)(i)**

Training records shall include the following information:

**1910.1030(h)(2)(i)(A)**

The dates of the training sessions;

**1910.1030(h)(2)(i)(B)**

The contents or a summary of the training sessions;

**1910.1030(h)(2)(i)(C)**

The names and qualifications of persons conducting the training; and

**1910.1030(h)(2)(i)(D)**

The names and job titles of all persons attending the training sessions.

**1910.1030(h)(2)(ii)**

Training records shall be maintained for 3 years from the date on which the training occurred.

**1910.1030(h)(3)**

***Availability.***

**1910.1030(h)(3)(i)**

The employer shall ensure that all records required to be maintained by this section shall be made available upon request to the Assistant Secretary and the Director for examination and copying.

**1910.1030(h)(3)(ii)**

Employee training records required by this paragraph shall be provided upon request for examination and copying to employees, to employee representatives, to the Director, and to the Assistant Secretary.

**1910.1030(h)(3)(iii)**

Employee medical records required by this paragraph shall be provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee, to the Director, and to the Assistant Secretary in accordance with 29 CFR 1910.1020.

**1910.1030(h)(4)**

***Transfer of Records.***

**1910.1030(h)(4)(i)**

The employer shall comply with the requirements involving transfer of records set forth in 29 CFR 1910.1020(h).

**1910.1030(h)(4)(ii)**

If the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, the employer shall notify the Director, at least three months prior to their disposal and transmit them to the Director, if required by the Director to do so, within that three month period.

**1910.1030(h)(5)**

***Sharps injury log.***

**1910.1030(h)(5)(i)**

The employer shall establish and maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log shall be recorded and maintained in such manner as to protect the confidentiality of the injured employee. The sharps injury log shall contain, at a minimum:

**1910.1030(h)(5)(i)(A)**

The type and brand of device involved in the incident,

**1910.1030(h)(5)(i)(B)**

The department or work area where the exposure incident occurred, and

**1910.1030(h)(5)(i)(C)**

An explanation of how the incident occurred.

**1910.1030(h)(5)(ii)**

The requirement to establish and maintain a sharps injury log shall apply to any employer who is required to maintain a log of occupational injuries and illnesses under 29 CFR 1904.

**1910.1030(h)(5)(iii)**

The sharps injury log shall be maintained for the period required by 29 CFR 1904.6.

**1910.1030(i)**

***Dates --***

**1910.1030(i)(1)**

***Effective Date.*** The standard shall become effective on March 6, 1992.

**1910.1030(i)(2)**

The Exposure Control Plan required by paragraph (c) of this section shall be completed on or before May 5, 1992.

**1910.1030(i)(3)**

Paragraph (g)(2) Information and Training and (h) Recordkeeping shall take effect on or before June 4, 1992.

**1910.1030(i)(4)**

Paragraphs (d)(2) Engineering and Work Practice Controls, (d)(3) Personal Protective Equipment, (d)(4) Housekeeping, (e) HIV and HBV Research Laboratories and Production Facilities, (f) Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up, and (g)(1) Labels and Signs, shall take effect July 6, 1992.

[56 FR 64004, Dec. 06, 1991, as amended at 57 FR 12717, April 13, 1992; 57 FR 29206, July 1, 1992; 61 FR 5507, Feb. 13, 1996; 66 FR 5325 Jan., 18, 2001; 71 FR 16672 and 16673, April 3, 2006]

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